



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,426	12/23/2003	John Baranowski	016354.020	7538

24735 7590 06/13/2005

BAKER BOTTS LLP  
C/O INTELLECTUAL PROPERTY DEPARTMENT  
THE WARNER, SUITE 1300  
1299 PENNSYLVANIA AVE, NW  
WASHINGTON, DC 20004-2400

EXAMINER

MATTHEWS, TERRELL HOWARD

ART UNIT	PAPER NUMBER
----------	--------------

3654

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/743,426	BARANOWSKI, JOHN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Terrell H. Matthews	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/08/2004</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

Art Unit: 3654

## DETAILED ACTION

Claims 1-20 are pending in the instant application.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 6-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sugioka. (4561510)

Referring to claims 1-2 Sugioka discloses a "dispersing supply apparatus in automatic weighing system" as claimed. See Figs. 1-7 and respective portions of the specification. Sugioka discloses a feeder bowl (15), dispensing paths (14), a rotation drive (18), a dispensing head (6), a dispensing chute (62a), diversion chute (62b), weight sensors (2), weighing hoppers (3), gates (3a, 4a), vibrating unit (16), a drive unit (17), a drive motor (40), shutters (65), sensors (70), and electromagnets (164). Sugioka

Art Unit: 3654

further discloses that vibrating unit (16) supports the feeder bowl (15) (See Col. 3 l. 33) and that dispensing paths (14) are subjected to up and down helical vibration (See Col. 5 l. 63). It should be noted that although Sugioka does not mention a control unit, it is understood to be an included part in his apparatus as a result of Sugioka disclosing sensors, which are responsible for sending signals to start or halt the operation of the dispensing paths. Additionally, it should be understood that Sugioka's apparatus controls the rotational speed of the rotation drive, the vibration of the feeder bowl, and the vibration of the dispensing paths. If applicant disagrees that Sugioka does not teach a control unit then it is noted that the feeder bowl, rotation drive and dispensing paths do not just vibrate randomly and that they must be controlled to deliver articles in a smooth and uniform manner. It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Sugioka to include a control unit that monitored feeder bowl vibration, the rotation drive, and dispensing path vibration so that the rate articles were dispensed could be controlled.

Referring to claims 6-8. Sugioka discloses the invention as described in detail above. Sugioka further discloses that the dispensing paths (14) undergo two forms of vibratory motion, which continue in alternating fashion. (See Col. 4 l. 14-16). Sugioka additionally discloses that the dispensing paths undergo helical vibration that consist of twisted upwardly and downwardly motion.

***Claim Rejections - 35 USC § 103***

Claims 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugioka in view of Matsuyama. (6689961)

Referring to claim 3. Sugioka discloses the invention described in detail above. Sugioka further discloses that articles are dispensed in a smooth and uniform manner so that dispensing heads are supplied with approximately constant amounts of articles (See Col 1. l. 62-68 & Col. 2 l. 1-3). Sugioka additionally discloses that his apparatus contains weight sensors (2), which are attached to respective weight hoppers (3) and gates (3a, 4a). Sugioka does not disclose a control unit that controls that at least one physical characteristics of each of the items to be dispensed. Sugioka does not disclose a control unit that will control the physical characteristic of an item to be dispensed. Matsuyama discloses a "combinational weighing apparatus" as claimed. See Figs. 1-4 and respective portions of the specification. Matsuyama discloses a distributing apparatus (21), pool hoppers (23), weighing hoppers (24), conveyance feeders (22), feed hopper (27), vibration units (22a), gates (23a), load cells (28), control unit (29), collection chute (30), distributing table (41), and rotation shaft (62). Matsuyama further discloses that articles are fed from the pool hopper (23) to the weight hoppers (24) where the weights are measured and that a control unit (29) executes a combinational operation of the respective weight values to select which items are allowable to be dispensed through gates (24a) to collection chute (30) (See Col. 5 Para. 1&2). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of

Art Unit: 3654

Sugioka to include the control unit of Matsuyama so that items could be dispensed based on a physical characteristic.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugioka in view of Simionato. (5613590)

Referring to claims 4-5. Sugioka discloses the invention as describe above. It should be understood and can be broadly construed that Sugioka's apparatus includes a control unit that controls the vibration of the feeder bowl as discussed above. (See Claim Rejections 1-2). Sugioka does not disclose a plurality of dispensing path vibration devices each of which vibrates one or more dispensing paths or channels. Simionato discloses a "device for distribution of material" as claimed. See Figs. 1-2 and respective portions of the specification. Simionato discloses a dispensing path (12), a plurality of channels (15), and rectilinear vibrators (17). Simionato further discloses that the vibrators are located directly below the dispensing paths and channels and act to confer articles forward to the collection points (See Col. 2 l. 40). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Sugioka to include a plurality of dispensing paths with channels so that items could be dispensed singularly to the collection chute to help with accuracy in counting.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugioka in view of Matsuura. (4548287)

Referring to claim 9-10. Sugioka discloses the invention as described above.

Sugioka does not disclose a control unit that controls the frequency of vibration of the feeder bowl and dispensing paths. Matsuura discloses a "combination weighing machine with a vibratory feeder and hopper" as claimed. See Figs. 1-41 and respective portions of the specification. Matsuura discloses feeder plates (5), oscillators (214), control (215), distribution plates (A<sub>1</sub>, A<sub>2</sub>) and feeding troughs (B<sub>1</sub>, B<sub>2</sub>). Matsuura further discloses that articles are transferred from the distribution plates to the troughs through vibration and that the oscillator (214) generates the peak values and the frequency set in the control. Additionally, Matsuura discloses that it is possible to set the peak values and frequency of the oscillator (214) to change the transfer conditions depending upon the kinds of the product to be measured, thereby enabling products within the wide range in weight, size and the like to be transferred with high efficiency. It is understood that the ability to set the oscillator to varying transfer conditions depending on the product comprises setting the frequency of the oscillator to vibrate in a first and second plane (See Col. 17 l. 15-16, 23-29). It would have been obvious to a person of ordinary skill in the art to modify the system of Sugioka to include a control unit that would allow you to set the frequency of the vibrating feed plate and dispensing paths as taught by Matsuura so that items with varying physical characteristics could be targeted to be transferred to the collection chute.

Art Unit: 3654

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugioka in view of Haze. (4553616)

Referring to claims 11-12. Sugioka discloses the invention as described above.

Sugioka does not disclose a control unit that can control the magnitude of vibration of the feeder bowl in the first and second plane. Haze discloses a "combinatorial weighing apparatus having memory for storing weighing conditions" as claimed. See Figs. 1-6 and respective portions of the specification. Haze discloses a dispersing feeder (1), an oscillatory vibrator (2), a supply trough feeder (3), a trough vibrator (4), a pool hopper (5), a weight hopper (6), a weight sensor (7), a control unit (21), and a write control unit (30). Haze further discloses that adjustment of the amplitude of the vibration of the dispersing feeder (1) and supply trough feeders (3) in order to control the amount of articles supplied, is achieved by regulating the magnitude of the current flowing into the electromagnet of each feeder (See Col. 2 l. 29-33). It should be noted that this is generally known in the field of the art. Haze additionally discloses that the control unit (21) is used to enter the target value of a combinatorial weighing operation, the upper and lower limit values for defining the allowable limits of the weighing operation, and weighing conditions for controlling the quantity of articles supplied by the feeders. It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Sugioka to include a control unit that could control the magnitude of vibration of the feeder bowl and dispensing paths so that items of differing physical characteristics could be targeted for transfer to the collection chute.



Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugioka in view of Matsuura and in further view of Haze.

Referring to claim 13. Sugioka discloses the invention as described above.

Sugioka does not disclose a control unit that controls the frequency or magnitude of vibration of the feeder bowl or dispensing paths in a first and second plane. Matsuura disclose the invention as described above. Matsuura further discloses a system that controls the vibration through setting the frequency on oscillators. Haze discloses the invention as described above in detail. Haze further discloses a control unit that controls the magnitude of vibration of the feeder bowl and dispensing paths. It would have been obvious to a person of ordinary skill in the art to modify the system of Sugioka to include a control unit that could control the frequency and magnitude of the feeder bowl and dispensing paths as taught by Matsuura and Haze respectively so that items could be targeted based on their physical characteristics to be transferred to the collection chute.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugioka in view of Haze.

Referring to claim 14. Sugioka discloses the invention as described above.

Sugioka does not disclose a memory for storing a plurality of vibrational settings for the feeder bowl or the dispensing paths, where each of the settings is proportionate to a

Art Unit: 3654

physical characteristic of the items to be dispensed, or an input unit for selecting the settings where the control units adjust the feeder bowl so it dispenses items uniformly and so that the dispensing path dispenses items singularly. Haze discloses the invention as described above. Haze discloses the system as described above. Haze further discloses a numeric keys (23), setting key (24), write control unit (30), read control unit (31), data input unit (21), and a storage unit (29). Haze further discloses that the write control unit (30), in response to keys pressed on the data input unit (21), writes set weighing conditions into the prescribed spaces of the memories through the storage unit (29). Haze additionally discloses that the control unit (21) is used to enter the target value of a combinatorial weighing operation, the upper and lower limit values for defining the allowable limits of the weighing operation, and weighing conditions for controlling the quantity of articles supplied by the feeders (See Col. 4 l. 13-19). It is understood that the control unit adjusts the vibration of the feeder bowl and dispensing paths so that items can be dispensed in a smooth and controlled quantity. It would have been obvious to a person of ordinary skill in the art to modify the system of Sugioka to include memory for storing vibrational settings so that conditions can be stored for latter use and time can be saved by not having to go through a trial and error method to figure out the best settings.

Claim 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugioka in view of Tatsuoka. (5765655)

Referring to claim 15-18. Sugioka does not disclose at least on physical characteristic of the second plurality of received items being greater or less than the predetermined range of physical characteristics. Tatsuoka discloses a "Combinational weighing machine with a discharge chute having a article guide surface" as claimed. See Figs. 1-7 and respective portions of the specification. Tatsuoka further discloses a pool hopper (24), weigh hopper (28), gates (24a, 28a), and discharge chutes (30) composed of upper chute (32), middle chute (34), and a lower chute (36). Tatsuoka further discloses that middle chute (34) has four buffer (37) that match partition boards (38) and that lower chute (36) forms a discharge opening (36a). Additionally Tatsuoka discloses that articles to be weighed are temporarily stored in pool hopper (24), then discharged through gates (24a) and received by weighed hoppers (28) and measured by weighing unit (27) and processed by CPU (54), which carries out calculations based on the physical characteristics. The CPU then selects a combination on based on criteria of a predetermined physical characteristic range and outputs the signal to the gate drivers (58) which causes gates (28a) of only those of weigh hoppers (28) that meet the predetermined range to be discharged down chute (30). Tatsuoka then discloses that new articles are supplied into weigh hoppers (28) from pool hoppers (24) and items that were just dispensed from weigh hoppers (28) are then sent down upper chute (32) and that articles that are selected by combination to be isolated move sideways and may be pushed sideways and spiral down middle chute (34), therefore articles discharged in different cycles of the combinational calculations are dependably separated as they are discharged (See Col. 5. l. 54-56). It can be broadly construed that

Art Unit: 3654

the items that are isolated are the second plurality of items that do not meet the predetermined range and therefore are sent down middle chute (34). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Sugioka to include a holding chamber like that taught by Tatsuoka so that items that met and did not meet a predetermined range could be separated and dispensed independently of the other this would help in separating items for packaging and counting.

### ***Allowable Subject Matter***

Claims 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The prior art does not indicate an apparatus that is capable of delivering the second plurality of articles of a predetermined range released from the dispensing head back to the feeder bowl.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

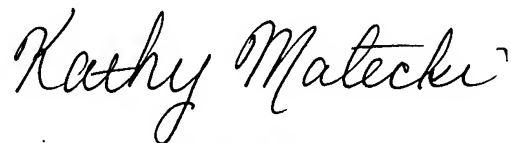
Art Unit: 3654

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell H. Matthews whose telephone number is (571)272-5929. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

\*\*\*



KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600